

Title (en)
Touch sensor using optical fiber

Title (de)
Berührungssensor mit Glasfaser

Title (fr)
Capteur tactile utilisant une fibre optique

Publication
EP 1883008 A2 20080130 (EN)

Application
EP 07113271 A 20070726

Priority
JP 2006205960 A 20060728

Abstract (en)

In a touch sensor, one ends of optical fibers (13) are disposed at positions corresponding to respective pressure sensing points on a sensor sheet. The optical fibers in a bundled form are connected in a detection unit (30). The detection unit includes therein a camera that takes an image showing a change in luminance at the other ends of the optical fibers. A transmissive body is disposed to contain the other ends of the optical fibers and light sources. Upper and side faces of the transmissive body are covered with antireflection members. The transmissive body has substantially the same refractive index as the core of each optical fiber. A force applied to the sensor sheet (10) is detected based on the change in luminance at the other ends of the optical fibers shown in the image taken by the camera.

IPC 8 full level
G06F 3/042 (2006.01)

CPC (source: EP US)
G01L 1/24 (2013.01 - EP US); **G06F 3/042** (2013.01 - EP US)

Cited by
WO2017196280A1; US10795507B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1883008 A2 20080130; EP 1883008 A3 20080917; JP 2008032522 A 20080214; US 2008047364 A1 20080228; US 7444887 B2 20081104

DOCDB simple family (application)
EP 07113271 A 20070726; JP 2006205960 A 20060728; US 88183207 A 20070727